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AGRICULTURAL MEMORANDUM NO. 516

County Isomerics for Rainfall

L P Smith

Annual Average Rainfalls can be estimated to a fair degree of accuracy; to obtain monthly averages, it is usual to use isomerics, the percentages of the annual appropriate to each calendar month.

Such isomerics are available in form of isopleths on maps; alternative versions have now been found by taking the mean percentages from stations in each county published in MO 635.

As isomerics vary with height above sea level, the mean county values will not be exact for any one site, but as the future rainfalls are unlikely to maintain the 1916-1950 monthly patterns, the error is not important.

Any comments or suggestions on this paper should be referred to the author.

November 1972

Meteorological Office
Bracknell

SS/11/72/

APPENDIX

MEAN MONTHLY PERCENTAGES OF AVERAGE ANNUAL RAINFALL (1916-50)

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
Bedford	8.8	6.5	6.3	7.7	8.5	6.7	10.0	9.3	8.6	9.3	10.1	8.2
Berkshire	9.2	6.9	6.4	7.5	7.5	6.2	9.8	8.7	8.3	10.0	10.5	9.0
Bucks.	9.3	6.8	6.3	7.5	7.9	6.3	9.6	8.7	8.7	9.7	10.4	8.8
Cambs.	8.9	6.4	6.1	7.6	8.2	7.3	10.9	8.7	9.0	9.2	9.8	7.9
Cheshire	9.4	7.2	5.8	6.2	7.4	7.0	9.6	9.9	8.7	10.1	9.7	9.0
Cornwall	11.5	8.2	7.1	5.9	6.2	5.0	7.1	7.6	7.5	10.5	11.8	11.6
Cumberland	11.0	7.2	6.1	5.7	5.7	6.0	8.1	9.3	9.6	11.0	10.3	10.0
Derby	10.6	8.0	6.3	6.9	6.9	6.2	8.6	8.7	8.0	9.9	10.4	9.5
N Devon	11.3	7.7	6.1	6.1	5.6	5.0	7.6	8.4	8.5	10.9	11.5	11.3
S Devon	11.7	7.9	6.9	6.2	6.1	5.1	7.2	7.7	7.7	10.1	11.8	11.6
Dorset	10.9	7.5	6.7	6.3	6.4	4.9	7.3	7.8	8.2	10.7	12.0	11.3
Durham	9.3	6.9	6.2	6.4	7.4	6.7	10.0	10.5	8.7	9.5	9.7	8.7
Essex	9.3	6.6	6.2	7.9	7.2	6.6	9.8	8.9	8.2	9.9	10.5	8.9
Gloucester	9.7	7.0	6.5	7.0	7.8	6.1	8.8	9.1	8.6	10.0	10.0	9.4
Hants.	10.8	7.3	6.5	6.8	6.4	5.4	8.1	8.0	8.0	10.5	11.5	10.7
Hereford	10.4	7.2	6.7	6.9	7.8	5.9	8.3	8.7	8.0	10.1	10.6	9.4
Hertford	9.6	6.8	6.2	7.8	7.4	6.4	9.6	8.5	8.5	9.6	10.7	8.9
Hunts.	8.9	6.5	6.2	7.6	8.6	7.6	9.8	9.0	9.4	8.7	9.9	7.8
Kent	9.6	7.1	6.3	7.4	6.8	5.6	8.5	8.4	7.8	10.8	11.8	9.9
N Lancs.	10.0	6.7	5.7	5.4	6.5	6.5	8.7	10.2	10.0	11.0	9.9	9.4
Central Lancs.	10.0	7.2	5.7	5.7	6.3	6.4	8.7	10.3	9.4	10.8	10.2	9.3
S Lancs.	10.0	7.4	5.8	5.8	6.6	6.5	8.6	10.2	8.9	10.6	10.3	9.3
Leics.	9.2	7.2	6.2	7.6	8.0	6.7	10.1	9.4	8.2	9.3	9.8	8.3
Lincoln	9.1	7.1	6.0	7.1	7.9	7.0	10.2	9.6	8.3	9.2	10.0	8.5
London	8.8	6.6	6.3	7.8	7.6	7.0	9.8	9.3	8.2	9.5	10.4	8.7
Norfolk	9.2	6.9	5.9	7.3	7.0	6.7	9.9	8.4	9.0	9.8	10.8	9.1
Northants	9.3	6.9	6.3	7.8	8.0	6.7	9.5	8.9	8.6	9.5	10.1	8.4
Northumberland	9.5	6.7	6.4	6.3	7.1	6.5	10.0	10.7	8.6	9.8	9.6	8.8
Notts	9.3	7.3	6.3	7.1	8.0	6.4	9.9	9.7	8.0	9.5	9.9	8.6
Oxford	9.2	6.9	6.3	7.6	8.0	6.4	9.3	8.7	8.7	9.8	10.1	9.0
Salop	9.6	7.1	6.4	7.1	8.0	6.3	9.3	9.2	7.9	10.1	10.0	9.0
Somerset	10.1	7.2	6.2	6.4	6.9	5.6	8.3	9.3	8.4	10.6	10.8	10.2
Staffs.	9.4	7.1	6.0	6.9	7.8	6.6	9.9	9.7	8.2	9.8	9.9	8.7
Suffolk	9.0	6.6	5.9	7.6	6.9	6.8	10.0	9.1	9.0	9.6	10.6	8.9
Surrey	9.6	7.1	6.3	7.7	6.9	6.1	9.1	8.6	7.6	9.9	11.1	10.0

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
Sussex	10.5	7.3	6.4	6.8	6.2	5.4	7.9	8.2	7.7	10.8	12.1	10.7
Warwick	9.4	6.9	6.2	7.6	8.4	6.6	9.7	9.3	8.4	9.4	9.7	8.4
W'land	12.4	7.8	6.3	5.5	5.3	5.3	6.9	8.3	9.1	11.2	11.0	10.9
Wilts.	10.0	7.3	6.4	6.9	7.0	6.0	8.5	8.5	8.2	10.3	10.8	10.1
Worcs.	9.6	6.6	6.2	7.3	8.8	6.4	9.6	9.2	8.4	9.6	9.7	8.6
E.R.	9.6	7.5	5.9	6.9	7.3	6.9	9.4	10.0	8.1	9.3	10.1	9.0
N.R.	10.0	7.4	6.2	6.6	7.0	6.6	9.3	9.9	8.3	9.6	10.0	9.1
W.R.	10.7	8.2	6.2	6.5	6.7	6.0	8.3	9.1	8.3	10.3	10.4	9.3
WALES												
Anglesey	10.7	6.9	6.2	5.4	6.5	6.1	7.3	8.5	9.4	11.5	10.8	10.7
Brecon	11.8	8.1	6.5	6.3	6.0	5.6	7.4	8.0	7.9	10.6	10.8	10.9
Caerns.	11.2	7.7	6.2	5.6	5.5	6.4	7.9	9.0	8.9	11.0	10.2	10.4
Cards.	10.9	7.8	6.3	5.9	5.8	5.6	8.1	8.4	8.5	11.0	11.0	10.7
Carm.	11.4	7.6	6.4	5.8	6.1	5.5	7.7	8.5	7.9	10.9	11.1	11.1
Denbigh	10.8	8.0	6.4	6.5	6.7	6.0	7.4	8.2	8.5	11.0	10.3	10.2
Flint	9.4	7.2	6.4	6.5	7.8	6.3	9.0	9.3	8.4	10.5	9.9	9.3
Glam.	11.5	7.8	6.0	5.7	5.8	5.4	8.0	8.7	8.5	10.8	11.0	10.8
Merioneth	10.7	8.1	6.1	5.9	6.0	6.4	7.9	8.9	8.8	11.0	10.2	10.0
Mon.	11.1	7.5	6.8	6.5	6.6	5.5	7.9	8.5	7.9	10.5	10.7	10.5
Montgom.	11.4	8.4	6.2	6.3	6.5	5.9	7.6	8.3	7.8	10.6	10.7	10.3
Pemb.	11.4	7.5	6.3	5.5	5.8	5.2	8.0	8.2	8.4	11.1	11.5	11.1
Radnor	11.1	8.4	6.5	6.4	6.1	5.7	7.7	8.2	8.1	10.4	10.7	10.7